

REMARKS/ARGUMENTS

Favorable consideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 15-29 are pending in the application, with Claim 1-14 cancelled and 15-29 amended by the present amendment.

In the outstanding Office Action, Claims 1-10 and 12-14 were rejected under 35 U.S.C. § 102(a) as being anticipated by Chen et al. (hereinafter Chen) ("Some Mechanisms to Improve TCP/IP Performance Over Wireless and Mobile Computing Environment," July 4, 2000); and Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Boudreaux (U.S. Patent No. 6,466,556 B1).

Claims 1-14 are cancelled without prejudice or disclaimer. New Claims 15-29 substantially correspond to original Claims 1-14, albeit rewritten to more clearly describe and distinctly claim Applicants' invention. No new matter is added.

Briefly recapitulating, new Claim 29 is directed to an agent apparatus, performing as a home agent or a gateway foreign agent, for transferring IP packets destined for a mobile terminal equipment in a mobile IP network, to which mobile terminal equipment is moving. The apparatus includes: a) a determining device configured to, upon receiving an IP packet destined for the mobile terminal equipment when the mobile terminal equipment is doubly registered during a handoff, determine whether or not the IP packet is of real-time traffic; b) a multicasting device configured to multicast the IP packet to both the previous foreign agent and the new foreign agent if the IP packet is of real-time traffic; c) a buffer configured to buffer the IP packet in its agent if the IP packet is of non-real-time traffic; and d) a transfer device configured to, when the handoff has been completed and IP packets of non-real-time traffic are buffered, transfer the buffered IP packets of non-real-time traffic to the new foreign agent having the mobile terminal equipment.

Chen discloses a method and system for buffering non-real time traffic and directed multicasting real time traffic during a mobile handover, where the mobile handover includes a step of a new base station receiving a registration reply.<sup>1</sup> Chen discloses that the new base station begins multicasting once the previous base station detects a handover.<sup>2</sup> Chen does not disclose or suggest Applicants' claimed determining device, buffer, bicasting device and transfer device, each integrated within an agent device.

Applicants note that although a conventional base station (a foreign agent (FA) or a base station (BS)), such as Chen, can be configured to judge whether or not the IP packet is real-time traffic, the conventional FA (or BS) must always supervise the occurrence of a packet because the packet is transferred asynchronously from a mobile terminal equipment. However, because the subsequent switching from one FA to another must be performed in a seamless manner. It is thereby necessary for the conventional FA to incorporate the switching control function. However, when the mobile terminal equipment is moving frequently around a handoff area, the handoff may occur frequently, requiring the conventional FA to have a complicated configuration.

On the contrary, Applicants' claimed apparatus eliminates the above prior-art problem allowing for simple configuration and operation. In the claimed invention, the home agent (HA) includes a buffer and performs the judging and buffering with the following effect. Although, in conventional systems, the buffer can be formed in a common area other than the HA, such a configuration requires an interface between the HA and the buffer, an interface between the FA and the buffer, and synchronous operations between the HA and FA. On the contrary, because the claimed HA includes a buffer and performs both the judgment and buffering in the same unit, it is not necessary for the FA to interface directly to the buffer.

---

<sup>1</sup> Chen, page 442, left column, line 46.

<sup>2</sup> Chen, page 442, left column, lines 52-65.

Therefore, the HA can perform the entire control operation. Thus, the FA can thereby have a more simple configuration than is possible with Chen.

Also, Chen has the disadvantage of delaying a real-time packet when the buffering is performed without condition and without judgment whether or not the IP packet is of real-time traffic. In contrast, the present invention avoids this problem because the HA can perform the judgment and multicasting the IP packet to the FA promptly without buffering.

MPEP § 2131 notes that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art.” *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375, 1376 (Fed. Cir. 2001) (claim to a system for setting a computer clock to an offset time to address the Year 2000 (Y2K) problem, applicable to records with year date data in “at least one of two-digit, three-digit, or four-digit” representations, was held anticipated by a system that offsets year dates in only two-digit formats). See also MPEP § 2131.02. “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Because Chen does not disclose or suggest all the features recited in Claims 15, 16, 17, 28 and 29, Chen does not anticipate the invention recited in Claims 15, 16, 17, 28 and 29, and all claims depending therefrom.


Applicants have also considered Boudreaux and submit that Boudreaux does not cure the deficiencies of Chen. As none of the cited prior art, individually or in combination, disclose or suggest all the elements of independent Claims 15, 16, 17, 28 and 29, Applicants submit the inventions defined by Claims 15, 16, 17, 28 and 29, and all claims depending

therefrom, are not rendered obvious by the asserted references for at least the reasons stated above.<sup>3</sup>

Accordingly, in light of the previous discussion, Applicants respectfully submit that the present application is in condition for allowance and respectfully request an early and favorable action to that effect.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

Michael E. Monaco  
Registration No. 52,041

I:\ATTY\MM\AMENDMENT\4392\210101US\_AM\_RCE.DOC

---

<sup>3</sup> MPEP § 2142 "...the prior art reference (or references when combined) must teach or suggest **all** the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."